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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.	
10/800,122	03/12/2004	Nobuo Togahara	4142.70026 9096		
24978 GREER, BURN	7590 12/27/200 NS & CRAIN	EXAMINER			
300 S WACKE		LU, KUEN S			
25TH FLOOR CHICAGO, IL	60606		ART UNIT	PAPER NUMBER	
			2167		
SHORTENED STATUTOR	Y PERIOD OF RESPONSE	MAIL DATE	DELIVERY MODE		
3 MONTHS		12/27/2006	PAPER		

Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

		Applicat	tion No.	Applicant(s)				
Office Action Summary		10/800,	122	TOGAHARA, NO	TOGAHARA, NOBUO			
		Examine	er	Art Unit				
		Kuen S.	Lu	2167				
Period fo	The MAILING DATE of this communi or Reply	cation appears on ti	ne cover sheet wit	th the correspondence a	ddress			
A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION. - Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication. - If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication. - Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).								
Status								
1) 🖂	Responsive to communication(s) file	d on <u>12 March 200</u> 4	<u>4</u> .					
2a)	•	b)⊠ This action is						
3)	Since this application is in condition for allowance except for formal matters, prosecution as to the merits is							
	closed in accordance with the practice under Ex parte Quayle, 1935 C.D. 11, 453 O.G. 213.							
Disposit	ion of Claims							
4) 🖂	4)⊠ Claim(s) <u>1-21</u> is/are pending in the application.							
	4a) Of the above claim(s) is/are withdrawn from consideration.							
5)	5) Claim(s) is/are allowed.							
6)⊠	Claim(s) <u>1-21</u> is/are rejected.							
7)	Claim(s) is/are objected to.							
8)[_]	8) Claim(s) are subject to restriction and/or election requirement.							
Applicat	ion Papers							
9) The specification is objected to by the Examiner.								
10)⊠ The drawing(s) filed on <u>12 March 2004</u> is/are: a)⊠ accepted or b)□ objected to by the Examiner.								
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).								
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).								
11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.								
Priority (ınder 35 U.S.C. § 119							
12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f). a) All b) Some * c) None of:								
	1. Certified copies of the priority documents have been received.							
	2. Certified copies of the priority documents have been received in Application No							
	3. Copies of the certified copies of the priority documents have been received in this National Stage							
application from the International Bureau (PCT Rule 17.2(a)). * See the attached detailed Office action for a list of the certified copies not received.								
Attachmer	t(s)							
1) Notice of References Cited (PTO-892) 4) Interview Summary (PTO-413)								
2) Notic	e of Draftsperson's Patent Drawing Review (P	TO-948)		s)/Mail Date formal Patent Application				
	mation Disclosure Statement(s) (PTO/SB/08) er No(s)/Mail Date <u>3/12/04 + 8/2/04</u> .		6) Other:					

DETAILED ACTION

1. The Action is responsive to Applicant's Application filed March 12, 2004. Please note Claims 1 and 2-21 are pending.

Information Disclosure Statement

2. The information disclosure statements filed March 12, 2004 and August 2, 2004 are in compliance with 37 CFR 1.97(c) and therein has been considered. Its corresponding PTO-1449s have been electronically signed as attached.

Drawings

3. The drawings, filed March 12, 2004, are considered in compliance with 37 CFR 1.81 and accepted.

Priority

4. Acknowledgment is made of applicant's claim for foreign priority under 35
U.S.C. 119(a)-(d) based on Japanese Patent Application No. JAPAN 2003-283314 filed
7/31/2003 and JAPAN 2004-025677 filed 2/2/2003.

Specification

5. The Specification is objected to because the section of CROSS REFERENCE TO RELATED APPLICATION is not included for foreign priority claim. Correction is required.

Abstract

6. Applicant is reminded of the proper language and format for an abstract of the disclosure.

The abstract should be in narrative form and generally limited to a single paragraph on a separate sheet within the range of 50 to 150 words. It is important that the abstract not exceed 150 words in length since the space provided for the abstract on the computer tape used by the printer is limited. The form and legal phraseology often used in patent claims, such as "means" and "said," should be avoided. The abstract should describe the disclosure sufficiently to assist readers in deciding whether there is a need for consulting the full patent text for details.

The language should be clear and concise and should not repeat information given in the title. It should avoid using phrases which can be implied, such as, "The disclosure concerns," "The disclosure defined by this invention," "The disclosure describes," etc.

The abstract of the disclosure is objected to because it contains the term "invention"

which can be implied. Correction is required. See MPEP § 608.01(b).

Claim Rejections - 35 USC § 101

6.1. 35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

6.1.1. As set forth in MPEP 2106 (II) (A):

The claimed invention as a whole must accomplish a practical application. That is, it must produce a "useful, concrete and tangible result." State Street, 149 F.3d at 1373, 47 USPQ2d at 1601-02. The purpose of this requirement is to limit patent protection to inventions that possess a certain level of "real world" value, as opposed to subject matter that represents nothing more than an idea or concept, or is simply a starting point for future investigation or research (Brenner v. Manson, 383 U.S. 519, 528-36, 148 USPQ 689, 693-96); In re Ziegler, 992, F.2d 1197, 1200-03, 26 USPQ2d 1600, 1603-06 (Fed. Cir. 1993)). Accordingly, a complete disclosure should contain some indication of the practical application for the claimed invention, i.e., why the applicant believes the claimed invention is useful.

Apart from the utility requirement of 35 U.S.C. 101, usefulness under the patent eligibility standard requires significant functionality to be present to satisfy the useful result aspect of the practical application requirement. See Arrhythmia, 958 F.2d at 1057, 22 USPQ2d at 1036. Merely claiming nonfunctional descriptive material stored in a computer-readable medium does not make the invention eligible for patenting. For example, a claim directed to a word processing file stored on a disk may satisfy the utility requirement of 35 U.S.C. 101 since the information stored may have some "real world" value. However, the mere fact that the claim may satisfy the utility requirement of 35 U.S.C. 101 does not mean that a useful result is achieved under the practical application requirement. The claimed invention as a whole must produce a "useful, concrete and tangible" result to have a practical application

6.1.2. As set forth in MPEP 2106 (IV) (B) (1):

Claims to computer-related inventions that are clearly nonstatutory fall into the same general categories as nonstatutory claims in other arts, namely natural phenomena such as magnetism, and abstract ideas or laws of nature which constitute "descriptive material." Abstract ideas, Warmerdam, 33 F.3d at 1360, 31 USPQ2d at 1759, or the mere manipulation of abstract ideas, Schrader, 22 F.3d at 292-93, 30 USPQ2d at 1457-58, are not patentable. Descriptive material can be characterized as either "functional descriptive

material" or "nonfunctional descriptive material." In this context, "functional descriptive material" consists of data structures and computer programs which impart functionality when employed as a computer component. (The definition of "data structure" is "a physical or logical relationship among data elements, designed to support specific data manipulation functions." The New IEEE Standard Dictionary of Electrical and Electronics Terms 308 (5th ed. 1993).) "Nonfunctional descriptive material" includes but is not limited to music, literary works and a compilation or mere arrangement of data. Both types of "descriptive material" are nonstatutory when claimed as descriptive material per se. Warmerdam, 33 F.3d at 1360, 31 USPQ2d at 1759. When functional descriptive material is recorded on some computer-readable medium it becomes structurally and functionally interrelated to the medium and will be statutory in most cases since use of technology permits the function of the descriptive material to be realized. Compare In re Lowry, 32 F.3d 1579, 1583-84, 32 USPQ2d 1031, 1035 (Fed. Cir. 1994) (claim to data structure stored on a computer readable medium that increases computer efficiency held statutory) and Warmerdam, 33 F.3d at 1360-61, 31 USPQ2d at 1759 (claim to computer having a specific data structure stored in memory held statutory product-by-process claim) with Warmerdam, 33 F.3d at 1361, 31 USPQ2d at 1760 (claim to a data structure per se held nonstatutory).

6.1.3. As set forth in MPEP 2106 (IV)(B)(1)(a):

Similarly, computer programs claimed as computer listings *per se, i.e.*, the descriptions or expressions of the programs, are not physical things." They are neither computer components nor statutory processes, as they are not acts" being performed. Such claimed computer programs do not define any structural and functional interrelationships between the computer program and other claimed elements of a computer which permit the computer programs functionality to be realized. In contrast, a claimed computer-readable medium encoded with a computer program is a computer element which defines structural and functional interrelationships between the computer program and the rest of the computer which permit the computer programs functionality to be realized, and is thus statutory. Accordingly, it is important to distinguish claims that define descriptive material *per se from claims* that define statutory inventions.

Products may be either machines, manufactures, or compositions of matter. A machine is "a concrete thing, consisting of parts or of certain devices and combinations of devices." Burr v. Duryee. 68 U.S. (1 Wall.) 531, 570 (1863).

If a claim defines a useful machine or manufacture by identifying the physical structure of the machine or manufacture in terms of its hardware or hardware and software combination, it defines a statutory product. See, e.g., *Lowry*, 32 F.3d at 1583, 32 USPQ2d at 1034-35; Warmerdarn, 33 F.3d at 1361-62, 31 USPQ2d at 1760.

Office personnel must treat each claim as a whole. The mere fact that a hardware element is recited in a claim does not necessarily limit the claim to a specific machine or manufacture. Cf. *In re Iwahashi*, 888 F.2d 1370, 1374-75, 12 USPQ2d 1908, 191 1-12 (Fed. Cir. 1989), cited with approval in *Alappat*, 33 F.3d at 1544 n.24, 31 USPQ2d at 1558 n_24.

6.2. Claims 1-2, 4, 6-9 and 14-21 are rejected under 35 U.S.C. § 101 because the claimed invention is directed to non-statutory subject matter.

As per claims 1, 16 and 19, the claims are method comprising, program embedded on medium to cause computer to perform and apparatus comprising components to

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perform, respectively, steps of analyzing, referencing, judging and a conditional registering step. It is noted the registering step is not performed should condition not met and performing analyzing, referencing and judging steps alone does not ensue any tangible result. However, a tangible, concrete and useful result is required in a practical application test. The consequence is non-statutory.

As per claims 7, 17 and 20, the claims are method comprising, program embedded on medium to cause computer to perform and apparatus comprising components to perform, respectively, steps of analyzing, referencing, judging and a conditional generating step. It is noted the generating step is not performed should condition not met and performing analyzing, referencing and generating steps alone does not ensue any tangible result. However, a tangible, concrete and useful result is required in a practical application test. The consequence is non-statutory.

As per claims 8, 18 and 21, the claims are method comprising, program embedded on medium to cause computer to perform and apparatus comprising components to perform, respectively, steps of obtaining, specifying and calling. It is noted performing the steps does not produce any useful result. However, a tangible, concrete and useful result is required in a practical application test. The consequence is non-statutory.

As per claims in the groups (2, 4, 6) and (9, 14, 15), the claims inherit the deficiency of being non-statutory directly or indirectly from claims 1 and 8, respectively, and do not

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remedy the deficiency individually or by inheritance. The consequence is non-statutory.

Claim Rejections - 35 USC § 103

- 7. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:
- (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

7.1. Claims 1-7, 16-17 and 19-20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Worden (U.S. Patent Application 2003/0149934) in view of Petersen et al. (U.S. Patent Application 2004/0006527, hereafter "Petersen").

As per claims 1, 16 and 19, Worden teaches "An information processing method" (See Abstract where a program uses a set of mappings between XML and business information logical structures), "A program embodied on a medium, for causing a computer to execute an information processing, said program" (See [0054] where program is used to specify instructions to a computer) and "An information processing apparatus" (See [0002] where computer systems conducts e-business transactions), comprising:

"(an analyzer for) analyzing XML data corresponding to a form screen, and specifying a

business class corresponding to a tag included in said XML data" (See [0592] where a business model entity is represented by an XML element, an entity structure is represented by structures inside of the element and all entities of a given class are represented by elements of a given tag name).

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Worden does not explicitly teach "(a checker for) referring to a business class manager in which items of said business classes to be created are registered, and judging whether an item of the specified business class has not been registered in said business class manager", although Worden teaches creating objects in classes from XML files and database.

However, Petersen teaches "(a checker for) referring to a business class manager in which items of said business classes to be created are registered, and judging whether an item of the specified business class has not been registered in said business class manager" (See [0069] where business method registers each of principal classes of transactions that are likely to arise in connection with public distribution of blank check company's shares and implementation of its business plan).

It would have been obvious to one having ordinary skill in the art at the time of the applicant's invention was made to combine the teaching of Petersen with Worden reference by determining the status of registration and registering the unregistered business classes because the business class registration method implemented by Petersen would have been applied to register mappings between XML logical structure and business information model such that existing mappings would have expedited the process of conveying information between business model and XM documents.

The combined teaching of the Petersen and Worden references further teaches "if said item of the specified business class has not been registered in said business class manager, registering said item of the specified business class in said business class manager" and "a register for registering said item of the specified business class in said business class manager, if said item of the specified business class has not been registered in said business class manager" (See Petersen: [0069] where business method registers each of principal classes of transactions that are likely to arise in connection with public distribution of blank check company's shares and implementation of its business plan).

As per claim 2, the combined teaching of the Petersen and Worden references further teaches "The information processing method as set forth in claim 1, further comprising: if said item of the specified business class has not been registered in said business class manager, generating template source program data for the specified business class" (See Worden: [0229] where Java objects are created; Petersen: [0069] where business method registers each of principal classes of transactions that are likely to arise in connection with public distribution of blank check company's shares and implementation of its business plan).

As per claim 3, Worden teaches "The information processing method as set forth in claim 1, further comprising: reading out an HTML file for said form screen, and generating XML data corresponding to said form screen according to a predetermined

rule" (See Worden: [0003] where XML is generated, viewed and transforming into HTML file; and further at [0050] where XML is derived from SGML in which HTML is an application).

As per claim 4, the combined teaching of the Petersen and Worden references further teaches "The information processing method as set forth in claim 1, wherein said analyzing and specifying comprises specifying a pre-processing class, a post-processing class and a form processing class, so as to correspond to a start tag or an end tag of said XML data corresponding to said form screen" (See Worden: [0229] where nodes and paths are defined by specifying one node and its type from root node, specifying two node types and a path to represent properties of an object of processing class and specifying three node types and paths to represent association between object classes).

As per claim 5, the combined teaching of the Petersen and Worden references further teaches "The information processing method as set forth in claim 3, further comprising: generating said HTML file for said form screen in response to an instruction of a user" (See Worden: [0003] where XML is generated, viewed and transforming into HTML file).

As per claim 6, Worden teaches the information processing method as set forth in claim 1, further comprising:

"specifying a form item storing object by a tag included in said XML data corresponding to said form screen" (See Worden: [0592] where a business model entity is represented by an XML element, an entity structure is represented by structures inside of the element and all entities of a given class are represented by elements of a given tag name);

"referring to a form item storing object manager in which items of form item storing objects to be created are registered, and judging whether an item of the specified form item storing object has not been registered in said form item storing object manager" (See Petersen: [0069] where business method registers each of principal classes of transactions that are likely to arise in connection with public distribution of blank check company's shares and implementation of its business plan); and "if said item of the specified form item storing object has not been registered in said form item storing object manager, registering said item of the specified form item storing object into said form item storing object manager" (See Petersen: [0069] where business method registers each of principal classes of transactions that are likely to arise in connection with public distribution of blank check company's shares and implementation of its business plan).

As per claims 7, 17 and 20, Worden teaches "An information processing method" (See Abstract where a program uses a set of mappings between XML and business information logical structures), "A program embodied on a medium, for causing a computer to execute an information processing, said program" (See [0054] where

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program is used to specify instructions to a computer) and "An information processing apparatus" (See [0002] where computer systems conducts e-business transactions), comprising:

"(an analyzer for) analyzing XML data corresponding to a form screen, and specifying a business class corresponding to a tag included in said XML data" (See [0592] where a business model entity is represented by an XML element, an entity structure is represented by structures inside of the element and all entities of a given class are represented by elements of a given tag name).

Worden does not explicitly teach "(a checker for) referring to a business class manager in which items of said business classes to be created are registered, and judging whether an item of the specified business class has not been registered in said business class manager", although Worden teaches creating objects in classes from XML files and database.

However, Petersen teaches "(a checker for) referring to a business class manager in which items of said business classes to be created are registered, and judging whether an item of the specified business class has not been registered in said business class manager" (See [0069] where business method registers each of principal classes of transactions that are likely to arise in connection with public distribution of blank check company's shares and implementation of its business plan).

It would have been obvious to one having ordinary skill in the art at the time of the applicant's invention was made to combine the teaching of Petersen with Worden reference by determining the status of registration and registering the unregistered

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business classes because the business class registration method implemented by Petersen would have been applied to register mappings between XML logical structure and business information model such that existing mappings would have expedited the process of conveying information between business model and XM documents.

The combined teaching of the Petersen and Worden references further teaches "if said item of the specified business class has not been registered in said business class manager, generating template source program data for the specified business class" and "a generator for generating template source program data for the specified business class, if said item of the specified business class has not been registered in said business class manager" (See Petersen: [0069] where business method registers each of principal classes of transactions that are likely to arise in connection with public distribution of blank check company's shares and implementation of its business plan, and Worden: [0197] where source code is generated by substituting class names in a standard template).

Claim Rejections - 35 USC § 102

- **8.** The following is a quotation of the appropriate paragraphs of 35 U.S.C. §102 that form the basis for the rejections under this section made in this Office action:
- 8.1. A person shall be entitled to a patent unless -
- (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.
- (e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

8.2. Claims 8-15, 18 and 21 are rejected under 35 U.S.C. § 102(e) as anticipated by Worden (U.S. Patent Application 2003/0149934).

As per claims 8, 18 and 21, "An information processing method" (See Abstract where a program uses a set of mappings between XML and business information logical structures), "A program embodied on a medium, for causing a computer to execute an information processing, said program" (See [0054] where program is used to specify instructions to a computer) and "An information processing apparatus" (See [0002] where computer systems conducts e-business transactions), comprising: "obtaining XML data including a tag corresponding to data inputted or selected for a form screen, and specifying a business class that corresponds to said tag included in said XML data and is a program for carrying out a processing relating to said tag" and "a first processor, obtaining XML data including a tag corresponding to data inputted or selected for a form screen, and specifying a business class that corresponds to said tag included in said XML data and is a program for carrying out a processing relating to said tag" (See [0592] and [0427] where a business model entity is represented by an XML element, an entity structure is represented by structures inside of the element and all entities of a given class are represented by elements of a given tag name and object of entity, attribute or relation is selected from a screen); and "calling the specified business class among the business classes that are defined in advance, and are loaded into a memory" and "a second processor, calling the specified business class among the business classes that are defined in advance, and are loaded

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into a memory" (See [0439] where tree of business model is loaded on the screen, the screen memory).

As per claim 9, Worden teaches "The information processing method as set forth in claim 8, wherein said obtaining and specifying comprises specifying a pre-processing class, a post-processing class, and a form processing class that correspond to a form of said form screen and a tag included in said XML data" (See Worden: [0229] where nodes and paths are defined by specifying one node and its type from root node, specifying two node types and a path to represent properties of an object of processing class and specifying three node types and paths to represent association between object classes).

As per claim 10, Worden teaches the information processing method as set forth in claim 8, further comprising:

"outputting said data inputted or selected for said form screen to a form item storing object that is defined in advance and is loaded into a memory" (See Fig. 9-11 and [0239] where MDL extracts each component of meaning from input document and packages into output document);

"storing said data inputted or selected for said form screen into said memory by said form item storing object" (See Fig. 9-11 and [0239] where MDL extracts each component of meaning from input document and packages into output document); and "performing a processing by exchanging data between the called business class and

said form item storing object" (See Fig. 9-11 and [0239] where MDL extracts each component of meaning from input document and packages into output document and [0342[] where messages are exchanged between applications and businesses).

As per claim 11, Worden teaches the information processing method as set forth in claim 10, wherein said performing comprises:

"if data is transferred from a first business class to a second business class, outputting said data to an interclass interface object that is defined in advance and is loaded into said memory, by said first business class" (See [0342[] where messages are exchanged between applications and businesses); and

"referring to said interclass interface object and receiving said data from said interclass interface object by said second business class" (See [0342] and [0385] where messages are exchanged between applications and businesses, and relation is established between classes).

As per claim 12, Worden teaches the information processing method as set forth in claim 8, further comprising:

"receiving data inputted or selected for said form screen from an apparatus that displayed said form screen, and generating said XML data including said data inputted or selected for said form screen and corresponding tags" (See [0592] where a business model entity is represented by an XML element, an entity structure is represented by structures inside of the element and all entities of a given class are represented by

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elements of a given tag name).

As per claim 13, Worden teaches the information processing method as set forth in claim 10, further comprising:

"if an output request is received from a called business class, generating output XML data by using data held in said form item storing object" (See [0197] where source code is generated by substituting class names in a standard template);

"and outputting said output XML data to said apparatus that displayed said form screen" (See Fig. 9-11 and [0239] where MDL extracts each component of meaning from input document and packages into output document).

As per claim 14, Worden teaches "The information processing method as set forth in claim 8, further comprising: if the specified business class does not exist, generating and outputting error information" (See Fig. 9-11 and [0239], [0859] and [0938] where MDL extracts each component of meaning from input document and packages into output document and error messages are created).

As per claim 15, Worden teaches "The information processing method as set forth in claim 8, wherein each of the called business classes is configured so as to complete a processing for the entire form relating to said form screen by a processing executed by the called business classes without a program defining a processing sequence" (See [0042] where mapping is established between an XML language onto a business model

to read in data from XML and convert into an internal form reflecting business model structures for allowing data input and output between XML languages).

Conclusion

- **9.** The prior art made of record
 - A. U.S. Patent Application 2003/0149934
 - B. U.S. Patent Application 2004/0006527

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

- C. U.S. Patent Application 2003/0233249
- D. U.S. Patent Application 2003/0014441
- E. U.S. Patent 6,938,079

Contact Information

10. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Kuen S. Lu whose telephone number is (571) 272-4114. The examiner can normally be reached on Monday-Friday (8:00 am-5:00 pm). If attempts to reach the examiner by telephone pre unsuccessful, the examiner's Supervisor, John Cottingham can be reached on (571) 272-7079. The fax phone number for the organization where this application or proceeding is assigned is 703-305-39000.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for Page 13 published applications may be obtained from either Private PAIR or Public PAIR.

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Kuen S. Lu

Patent Examiner, Art Unit 2167

December 21, 2006